

Square roots

Simplify

$$\sqrt{49} = \sqrt{7 \cdot 7} = 7$$

$$\sqrt{36} = \sqrt{6 \cdot 6} = 6$$

$$\sqrt{y^2} = \sqrt{y \cdot y} = y$$

$$\sqrt[3]{27} = \sqrt[3]{3 \cdot 3 \cdot 3} = 3$$

$$\sqrt[3]{8} = \sqrt[3]{2 \cdot 2 \cdot 2} = 2$$

$$\sqrt[3]{y^4} = \sqrt[3]{y^3 \cdot y} = y\sqrt{y}$$

$$\sqrt[3]{a^3 b^4 c^5} = a \sqrt[3]{b^3 \cdot b \cdot c^3 \cdot c^2} = abc \sqrt{bc^2}$$

(Note: In the original image, there are handwritten annotations: a bracket under b^4 with a '2' and a '2' below it; a bracket under c^5 with a '3' and a '2' below it; and arrows indicating the grouping of terms into perfect cubes and a remaining square root.)